

Market-based Solutions for Realigning Spectrum Use in the 800 MHz Band

Lee L. Selwyn
Helen E. Golding¹

Economics and Technology, Inc.

June 2003

I. Introduction: The path to efficient spectrum allocation

For more than a decade, the FCC's spectrum policy has been following a path toward greater reliance upon market forces to accomplish the policy objectives formerly achieved through regulatory mandate. Each year, the Commission has progressed further down this path. As the Commission leads the way into this policy frontier, there will be many occasions on which it will be asked to revert to its traditional "command and control" approaches to resolve specific problems (whether actual or perceived).² Whenever possible, it is important that the Commission strive for solutions that rely upon market forces. The Commission's leadership can best be exercised by establishing a comprehensive spectrum allocation framework in which the vast majority of the

1. The report was prepared at the request of Shainis & Peltzman, Chartered, counsel for James A. Kay, Jr. The authors are, respectively, President and Vice President of Economics and Technology, Inc., Two Center Plaza, Suite 400, Boston, Massachusetts 02108. The opinions expressed herein are solely those of the authors.

2. The Consensus parties plan in WT Docket No. 02-55 for reallocation of frequencies in the 800 MHz band is an example of just this sort of request for a "command and control" solution to a problem that is perfectly capable of being resolved through the application of market-based forces.

specific transactions take place in a competitive market. In this paper, we discuss how these principles apply to the issues that have been raised in WT Docket No. 02-55 and the various proposed solutions to interference with public safety licensees operating in the 800 MHz band.³

Among the earliest indicators of the major shift toward reliance upon market forces came with Congress' 1993 amendments to the *Communications Act of 1934* which, among other things, authorized the Commission to assign licenses through competitive bidding in place of a contentious administrative hearing process. As of the Commission's *Seventh CMRS Competition Report*, over 37,000 licenses have been awarded through such auctions, raising in excess of \$43-billion for the U.S. Treasury.⁴ Moreover, the Commission has been spared the administrative burden of holding hearings on competing applications and defending its decisions against frequent appeals. In 1997, Congress extended the Commission's auction authority and expanded it to cover additional categories of licenses.⁵ In conjunction with spectrum auctions, legislation enacted since the mid-1990s has promoted more flexible policies of spectrum allocation. Both the 1996 *Telecommunications Act*⁶ and the amendments contained in the 1997 *Balanced Budget Act* broadened the FCC's mandate to encourage broadcast spectrum flexibility.

3. *In the Matter of Improving Public Safety Communications in the 800 MHz Band*, WT Docket No. 02-55, *Notice of Proposed Rulemaking*, 17 FCC Rcd 4873; 2002 FCC LEXIS 1341.

4. *Implementation of Section 6002(b) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services*, FCC 02-179, July 2002 ("*Seventh CMRS Competition Report*"), Appendix B.

5. 47 U.S.C. §309(j), enacted in Pub. L. No. 103-66; this section was further amended in the *Balanced Budget Act of 1997* (Pub. L. 105-33).

6. *Telecommunications Act of 1996*, Pub. L. No. 104-104, 110 Stat. 56 (1996 Act).

Of course, the policy of encouraging flexibility of use for designated spectrum and that of competitive bidding for spectrum do not operate in isolation from one another. Whereas initially competitive bidding was used as a tool for awarding a license for a predetermined specified use, the Commission and Congress have now fully recognized that it is desirable and frequently possible to let the market choose the most efficient use of spectrum among various possible applications. While the Commission's authority to design competitive bidding and encourage flexibility of spectrum usage are circumscribed by boundaries established by Congress, that authority is nonetheless quite broad.

Under the FCC's current leadership, progress toward promoting market-based spectrum allocation has accelerated. The Commission has launched several recent initiatives in this area, beginning with *en banc* hearings in 1996 and 1999,⁷ followed by the issuance of Policy Statements on "Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium"(November 1999)⁸ and "Principles for Promoting Efficient Use of Spectrum by Encouraging the Development of Secondary Markets (November 2000).⁹

7. See "Commission Announces Panelists, Agenda for En Banc Hearing on Spectrum Policy," Public Notice, DA 96-190 (released February 14, 1996) and "FCC Announces Panelists for En Banc Hearing on Spectrum Management," Public Notice (released April 1, 1999).

8. *Principles for Reallocation of Spectrum to Encourage the Development of Telecommunications Technologies for the New Millennium*, Policy Statement, 14 FCC Rcd 19868 (1999).

9. *Principles for Promoting Efficient Use of Spectrum By Encouraging the Development of Secondary Markets*, Policy Statement, 15 FCC Rcd 24178 (2000). The Commission followed up

More recently, the Commission broke new ground by convening a high-level, multi-disciplinary team of FCC professional staff to conduct a comprehensive and systematic review of the FCC's spectrum policies – the first in the Commission's nearly seventy year history. At the core of the Spectrum Policy Task Force's mission was the directive

to recommend ways in which to evolve the current 'command and control' approach to spectrum policy into a more integrated, market-oriented approach that provides greater regulatory certainty, while minimizing regulatory intervention.

In addition, the Task Force was asked to help the Commission to address recurring and "ubiquitous" issues in the areas of interference protection, spectral efficiency, effective public safety communications, and international spectrum policy. The Report issued by the Task Force in November 2002 contains many useful recommendations about how more flexible and market-driven approaches to spectrum policy can be used to optimize spectrum efficiency. Consistent with those policies, the Commission recently adopted new rules that facilitate flexible use of existing licenses, through the operation of the secondary market.¹⁰

this policy statement with a Notice of Proposed Rulemaking, *Promoting Efficient Use of Spectrum through Elimination of Barriers to the Development of Secondary Markets*," NPRM, WT Docket No. 00-230, 15 FCC Rcd 24203 (2000).

10. "FCC Adopts Spectrum Leasing Rules and Streamlined Processing for License Transfer and Assignment Applications, and Proposes Further Steps to Increase Access to Spectrum through Secondary Markets," News Release, May 15, 2003.

II. Staying the course: Making market-based approaches work in “real-world” situations

The Commission’s policies encourage innovative and customized uses of market mechanisms

As the Spectrum Policy Task Force Report makes clear, transitioning from the outmoded spectrum policies of the past to a new, forward-looking framework is a complex undertaking. There is no one-size-fits-all approach. On the other hand, the Report also makes it clear that it is important for the Commission to strongly and consistently favor market-based, flexible approaches over the more regulatory, “command and control” responses that have characterized spectrum policy in the past:

... the Commission can best promote economic efficiency by providing spectrum users with flexibility of spectrum use and ease of transferability in order to allow maximization of the value of the services provided. Flexibility provides incentives for economically efficient use and discourages economically inefficient use by ensuring that spectrum users will face the opportunity cost of their spectrum use. In most instances, the application of flexible service rules and efficient secondary market mechanisms are the best means of achieving this goal.

The Task Force recognized that not every situation will neatly fit into the market model, but urged the Commission to make minor adjustments that would address the particular situation, rather than abandon its overall market-based approach:

The Task Force recognized that there may be situations where the Commission finds it necessary to promote spectrum or technical efficiency (as opposed to economic efficiency) in order to promote particular public interest goals. However, in those instances, where marketplace forces may be inadequate, *e.g.*, in spectrum that is allocated

for government use, alternative mechanisms ... should be considered to stimulate improvements in efficiency.¹¹

Adapting the Commission's spectrum auction mechanisms to encourage targeted relocation of licensees in the 800 MHz band can significantly advance the objectives set forth by the Commission in its NPRM in WT Docket No. 02-55. This approach is consistent with other recent FCC policy initiatives. In the recently published *Spectrum Policy Task Force Report*, the Commission's in-house experts recommend promoting a "good neighbor" policy, saying:

Specifically, such a "good neighbor" policy would group future systems or devices by specifying comparable maximum levels of power and compatible interference protection levels. *For existing services, flexible use policies could create the incentive for spectrum-based systems or devices to migrate to compatible bands based on marketplace forces.* In some limited instances, however, there may be particular types of systems or devices, public safety for example, that require more direct regulatory intervention (e.g., through creation of guard bands or other direct regulation of out-of-band interference) because the marketplace may not independently encourage such compatibility. *In addressing those issues, however, the Commission should be careful not to compromise or undermine the overall concept of flexible use.*¹²

Applying the Commission's policies to overcome conflicts within the 800 MHz band

It is imperative that the Commission keep this mandate in mind as it seeks a resolution to the problems addressed in the pending WT Docket No. 02-55, *Improving Public Safety Communications in the 800 MHz Band*. Among the various solutions that have been put forward in that proceeding are several that rely upon mandatory relocation of incumbent licensees in

11. Spectrum Policy Report, Section V.D. (p. 21).

12. *Spectrum Policy Task Force Report*, Section V.E., p. 22.

precisely the highly prescriptive fashion that the FCC's forward-looking policy framework seeks to avoid. The Nextel proposal (also dubbed the "Consensus" proposal) is particularly egregious in this respect, both requiring the mandatory relocation of virtually every commercial and industrial licensee in the 800 MHz band and circumventing the Commission's bidding requirements for the allocation of new spectrum at 1.9 GHz. It sets up a highly complicated command and control structure; moreover, under this proposal, the "control" resides largely in the hands of a subset of affected interests, that is, Nextel and its public safety allies. Moreover, while the Nextel proposal may satisfy Nextel's parochial objectives and those of the public safety licensees from whom it has solicited support, it does not address the concerns of the majority of other stakeholders in the 800 MHz band.

Notably, while Nextel has put tremendous regulatory resources into building its case, it has not expended much effort demonstrating why a market-based approach could not be used in lieu of the complex and intrusive plan of spectrum relocation and substitution it has put forward. One obvious explanation is that a market-based approach, which would necessarily require that Nextel pay for the value it would receive under the realignment it seeks, will not generate the economic windfall that Nextel hopes to derive from its proposal. Some parties to WT Docket No. 02-55 have, in fact, recommended that market transactions be made a central part of any solution, but they typically have not attempted to describe in detail how such an approach would work.¹³ Others have gone so far as to blame the existing problems in the 800 MHz band on earlier policies

13. *See generally*, Docket No. WT 02-55, Comments [May 6, 2002] of Cinergy Corp. (at 9-22), Southern LINC (at 16-22), Consumers Energy (at 7-19), and DelMarva Power & Light Co./Atlantic City Electric Co. (at 16).

that relied upon market mechanisms and, on that basis, have recommend against any further steps in this direction.¹⁴ We strongly disagree. We firmly believe that a targeted market-based approach, with appropriate guidance from the Commission, can significantly advance the resolution of interference problems in the 800 MHz band in a manner that is efficient, competitively neutral, and consistent with the Commission’s overarching framework for spectrum policy.

III. Letting the market guide spectrum reallocation decisions in the 800 MHz band

Applying market principles to imperfect market conditions

Not all licensees in the 800 MHz band are similarly situated with respect to their direct financial interest in existing spectrum or in spectrum that the Commission might make available prospectively. Accordingly, the application of market principles to this problem is anything but straightforward. That said, however, the complexity of the problem is not so extensive as to negate the development of a workable market-based solution. Public safety users do not typically pay cash for their licenses, and thus do not participate in the “market” as such, at least not on the same basis as those whose economic interest is commercial in nature. They do, nevertheless, compete

14. For example, in its Reply Comments [August 7, 2002] at 11, Boeing Corporation takes issue with proposals to adopt a market-based approach to resolving interference problems in the 800 MHz band, claiming that “[i]t was exactly such a market based approach that ultimately caused many of the problems currently being experienced in the 800 MHz band, and it is clear that reliance on market based approaches have failed and will fail in this crucial situation.”

for spectrum with commercial users. Yet it is well established that the existence of an imperfect market does not preclude the use of a market-based approach.

Nextel is proposing *mandatory* realignment of the 800 MHz band. It, along with other holders of *commercial* licenses¹⁵ in the 800 MHz band – whether or not there are actually creating interference with public safety users – would be required to vacate those frequencies and be assigned substitute frequencies that do not cause such interference. In the case of Nextel, the “substitute” frequencies would consist of a contiguous *national* block of 10 MHz bandwidth in the 1.9 GHz band. The other commercial 800 MHz users would be required to accept substitute frequencies *within* the 800 MHz band that, for the most part, would make them no better off than their existing frequencies, but would cause them to incur varying amount of expense and inconvenience. Costs incident to the Nextel’s own move to 1.9 GHz would be borne by Nextel. Relocation costs incurred by 800 MHz public safety licensees, up to \$700-million in the aggregate, would be reimbursed by Nextel. Nextel would compensate commercial 800 MHz licensees for only a portion of their within-band relocation costs. Other than paying its own and some portion of others’ relocation costs, Nextel would make no payment for the 1.9 GHz spectrum itself.

In a sense, the plan being promoted by Nextel and its allies has characteristics in common with the conditions associated with a government taking of property under eminent domain in order to

15. In this context, the term “commercial” licensee is used to refer to all non-public-safety licensees in the 800 MHz band, regardless of the specific classification of their license (e.g., SMR, B/ILT, CMRS).

build a highway, an airport, or some other public facility.¹⁶ Ordinarily, such “takings” would require that the owner of each of the affected properties that is to be seized receive “just compensation” equal to the fair market value of that property.¹⁷ But in this case, as we explain later, the Nextel scheme does not contemplate that the benefits of “just compensation” be available to *all* affected parties.

In eminent domain takings, it is typically required that the property owner be compensated at the fair market value¹⁸ of the property *at the time of the taking*. The fact of the government’s taking of private property for some public use typically affects the value of that property – either up or down, depending upon the nature of the proposed use – but to the extent that the govern-

16. The law concerning eminent domain varies by jurisdiction and is highly complex. In drawing this analogy, we are drawing in a broad sense on eminent domain principles, but do not claim or pretend to opine as to legal matters or reflect the many nuances and jurisdiction-specific precedents relative to eminent domain. The specific law applicable in any given eminent domain case varies by jurisdiction. Our discussion here relates to the broad principles that are typically applied in cases of eminent domain. For a brief online primer concerning eminent domain law (in California), see, *The OVSM&L Property Owner’s Guide to Eminent Domain*, at www.eminentdomainlaw.net/ (accessed 6/12/03).

17. Admittedly, while licensees may not have absolute ownership of spectrum, they do have compensable property rights that are recognized in a variety of commercial transactions.

18. Market value has been defined by The Appraisal Institute) as “[t]he most probable price, as of a specified date, for which property rights should sell after reasonable exposure in a competitive market under all conditions requisite to a fair sale, the buyer and seller each acting prudently, knowledgeably and for self-interest, and assuming that neither is under undue duress.” *The Appraisal of Real Estate* 22 (12 ed. 2001), quoted in *Eminent Domain and Land Valuation Litigation*, ALI-ABA, 2003. A similar definition by the Society of Real Estate Appraisers, which merged into The Appraisal Institute in 1990, includes the caveat that the “price is not affect by undue stimulus.” SREA definition, quoted in *Current Condemnation Law: Takings, Compensation and Benefits*, ed. Ackerman, Alan T., American Bar Association, 1994, Chapter 2, “Effective Use of Real Estate Appraisers,” by Paul V. O’Leary.

ment's proposed use has unique characteristics that were outside the range of probably or reasonably anticipated uses for the property in a competitive market, this would not typically be considered in determining the "fair market value" that the property owner is entitled to receive.¹⁹ For example, suppose that a large parcel of isolated, vacant, and not particularly valuable land is to be taken to build a new airport. Once the decision to build the new airport has been announced to the public, the value of the property that is to be seized, as well as nearby property that is not going to be taken (but that might have been considered as "comparable" for valuation purposes to the property that is to be taken) will likely increase. However, all that the property owner would be entitled to receive is the market value, not the post-announcement value as uniquely influenced by the proposed use.²⁰

The eminent domain analogy applies to the mandatory reallocation of spectrum, because the public safety users will not be required to compete in any sort of auction or other market-driven pricing process for their spectrum allocation, and because virtually any solution that the Commission might adopt in this matter will affect the value of that spectrum, up or down. Also, and unlike traditional property takings, public safety licensees will not be required to "pay" even the fair market value of any additional spectrum that may be allocated to them. The Commission has earmarked spectrum in the 700 MHz band (that Congress has mandated be vacated by analog

19. See, *Olson v. United States*, 292 U.S. 246, 256 (1934): "But the value to be ascertained does not include, and the owner is not entitled to[,] compensation for any element resulting subsequently to or because of the taking."

20. *Id.*

UHF television licensees following the completion of their transition to digital technology²¹⁾ for public safety applications.²² Any spectrum that may be given up by Nextel or other commercial users for public safety use will not be “paid for” by the public safety users, so some other compensation device will need to be created. However, this constraint, while necessary to confront, does not preclude the use of a market-based mechanism to realign 800 MHz spectrum in a manner that resolves existing problems for public safety licensees that is compatible with the interests of other license holders in the 800 MHz band.

From the existence of Nextel’s proposal, it can be inferred that the value of the “replacement” spectrum that Nextel seeks to obtain at 1.9 GHz has a value (to Nextel, at least) that is in excess of the sum of (a) the \$850-million that Nextel proposes to pay relocated public safety and commercial licensees, (b) Nextel’s own relocation costs, and (c) the various negotiation and lobbying costs that Nextel is expending to push through its “consensus” proposal. Nextel’s windfall thus constitutes the difference between the sum of these three expenditures and the value of the 1.9 GHz spectrum that Nextel would be awarded under its proposal. The best way to determine and to capture the true value of this spectrum at 1.9 GHz is through a public auction, the same approach that has been successfully used for all other PCS licenses. While Nextel’s primary objective is to obtain unencumbered contiguous spectrum, it does so in a way intended to entice the Commission – by

21. See 47 U.S.C. §309(j)(14),

22. The 764-776 MHz and 794-806 MHz bands reserved for public safety are comprised of former television channels 63, 64, 68 and 69. See *Reallocation of Television Channels 60-69, the 746-806 MHz Band*, ET Docket No. 97-157, *Report and Order*, 12 FCC Rcd 22953 (1997).

addressing the public policy concerns about interference with the public safety licensees in the 800 MHz band – to give Nextel for free what its CMRS rivals have paid billions of dollars to acquire.

The purpose of a market-based mechanism under these circumstances is to permit license holders in the 800 MHz band to choose whether or not to relocate, based upon the fair value of the spectrum they would relinquish. Under such a mechanism, the option of relocating to help resolve interference problems in the 800 MHz band would be available to any 800 MHz licensee willing to relocate consistent with a framework established by the Commission. By contrast, under Nextel's scheme, while virtually all licensees would be financially affected, Nextel would be the only licensee to receive "compensation" that equals or exceeds the value of spectrum it would vacate (by receiving valuable contiguous spectrum awarded outside the 800 MHz band); others would, at best, be given the opportunity to "break even," and maybe not even that.

Using the market to assist in spectrum reallocation

We propose an alternative approach for the Commission's consideration – one that relies upon a market mechanism to select the most efficient (valued) use of this spectrum while also arriving at a solution to the technical problems that are occurring in the 800 MHz band.

The first advantage of using a market-based mechanism is that it comports with the Commission's policies on competitive bidding and flexible spectrum allocation. The FCC should not need to "give away" valuable spectrum at 1.9 MHz in order to resolve the problems that have been identified in the 800 MHz band, when commercial spectrum is typically subject to

competitive bidding. Thus, rather than simply permit Nextel to “swap” its existing 800 MHz licenses for far more valuable “replacement” spectrum in the 1.9 GHz bands, the FCC should proceed to allocate that same 10 MHz of spectrum at 1.9 GHz via an auction open to any compatible use.

The second advantage is that it gives licensees other than Nextel the opportunity to evaluate the relative benefits of relocating (consistent with the objectives of WT Docket No. 02-55) versus remaining at their existing frequencies. It is reasonable to assume that there are licensees operating in the 800 MHz band who may be open to the idea of relocating to other frequencies (in or out of the 800 MHz band), under circumstances that they deem advantageous. Nextel, for one, appears to be more interested in obtaining contiguous frequencies than in remaining in the 800 MHz band, but others may have their own reasons for considering a relocation including, for example, the opportunity to obtain contiguous frequencies *within* the 800 MHz band. Thus, a market mechanism aimed at relieving interference in the 800 MHz band could be crafted in a way that could be considered by other interested 800 MHz licensees.

To compensate existing 800 MHz licensees (including Nextel) for vacating their present frequencies, they would be offered “bidding credits” in amounts equal to the fair market value of the existing licenses. These “bidding credits” could then be “spent” to purchase the 1.9 GHz spectrum at auction or used to effect frequency swaps within the 800 MHz band (subject to Commission oversight to ensure that such swaps advance, rather than exacerbate, the resolution of interference problems in the 800 MHz band). Funding for the bidding credits would come from the proceeds of the 1.9 GHz auction, with the excess going to the US Treasury.

The market mechanism that we propose would not eliminate “command and control” regulation altogether, but would both limit the extent to which it is utilized and assure fair compensation for those who are involuntarily impacted. Three categories of existing commercial licensees in the 800 MHz band would be identified:

Category 1: Licensees that are sources of interference with public safety services, and licensees holding 800 MHz spectrum that may be needed to relocate the interfering 800 MHz users.

Category 2: Licensees that are not themselves the source of interference with public safety services, and who will not be offered the opportunity to participate in the relocation process, such as the “A” and “B” blocks of cellular frequencies.²³

Category 3: Other commercial licensees who are not specifically causing public safety interference but who would still be permitted to request bidding credits.

All Category 1 licensees will be required to relocate, either to the newly created 10 MHz space within the 1.9 GHz band, or elsewhere within the 800 MHz band. Funding for such relocations would come out of the auction proceeds. Assuming that the value of the 10 MHz space within the 1.9 GHz bands exceeds the appraised value of the 800 MHz licenses whose bidding credits are

23. Indeed, the large embedded base of handsets operating in the 800 MHz band makes it almost inconceivable that the existing “A” and “B” block licensees would have any interest in relocation.

used as currency for the auction, there would still be a net gain to the government from the set of transactions.²⁴ If Nextel or another large holder of 800 MHz licenses wins the auction, it would vacate all of its 800 MHz frequencies and make these available either for relocation of public safety or other commercial 800 MHz licensees, or for expansion of the public safety frequencies.

The auction proceeds (in excess of the bidding credits) would be used to fund relocation costs and to compensate other 800 MHz licensees for forced relocations. Should Nextel fail to win (or choose not to participate in) the auction for the 1.9 GHz license, a portion of the auction proceeds could then be applied to defray the costs of a mandatory in-band reorganization of the 800 MHz band intended to address the public safety interference problem. Should Nextel win the auction using the bidding credits that it had received, it would then vacate the no-longer-needed frequencies in the 800 MHz band, which could then either be reallocated to Public Safety, reassigned as part of a comprehensive reorganization of the 800 MHz band, or re-auctioned for use in ways that will not interfere with Public Safety. If sufficient additional 800 MHz spectrum is freed up, this may even suffice to fill Public Safety's requirements for additional spectrum, providing a potential opportunity for the FCC to auction off the spectrum in the 700 MHz band that is presently being reserved for Public Safety use, when such spectrum becomes available.

24. If a licensee (such as Nextel) uses other frequencies in the 800 MHz band that are not interfering with Public Safety, but that are part of a common system with licenses whose use is causing interference, appraisals could also be made of their value.

Valuing the existing 800 MHz commercial licenses

In order to develop a fair market value for the 800 MHz licenses currently being held by Nextel and other non-public safety users, and prior to the 1.9 GHz auction, the FCC would commission a panel of independent appraisers to develop consensus appraisals of the value of all licenses in the 800 MHz band that have been reported to be operating in a manner that causes interference with Public Safety frequencies, along with an estimate of relocation costs to various potentially available alternative spectrum. For example, a panel of five appraisers might be selected by the FCC and individual stakeholders or stakeholder groups, with the value of the licenses to be calculated as the average of the middle three appraisals, i.e., with the highest and lowest values being discarded. The Commission could then offer any such licensees the option to turn in the 800 MHz spectrum in return either for bidding credits (to be used in the auction) or for a cash payment reflecting the appraised spectrum value.

Although less than ideal, the use of appraisals rather than actual arm's length transactions as a basis for valuation is not uncommon, and is in fact widely used in eminent domain situations. The FCC has been conducting spectrum auctions for approximately nine years, and it and participating parties have gained extensive experience with this process and with the value of the spectrum itself. Between the FCC auctions and private two-party transactions, there is sufficient basis to expect that valid, fair market value appraisals can be developed.

Conclusion

Adoption of the market mechanism described herein will both serve the interests of all stakeholders while assuring that those parties who will not themselves realize any specific gain from the realignment of 800 MHz full and fair compensation for their (voluntary or involuntary) participation in the process. In the end, there will be a far more efficient alignment of the 800 MHz band. Public Safety licensees will suffer less or perhaps no interference from other users, and will also have access to additional spectrum to meet their growing requirements. Nextel will obtain the 10 MHz block in the 1.9 GHz band that it is seeking, as long as it is willing to pay the fair market value for its acquisition, which will also work to mollify Nextel's competitors. Existing 800 MHz licensees who, in the end, are still forced to relocate will receive compensation for all relocation costs and, in certain situations, for the value of the spectrum that they are being forced to vacate. The FCC's market-driven policies will have been maintained and expanded, and the United States Treasury will realize an infusion of cash from the auction process after all of the other claims on the proceeds have been satisfied.